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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,281	07/03/2003	Michael David Brookshire	0538.001	4021
34282	7590 03/22/2005		EXAM	INER
QUARLES & BRADY STREICH LANG, LLP ONE SOUTH CHURCH AVENUE			LAVINDER, JACK W	
	SUITE 1700		ART UNIT	PAPER NUMBER
TUCSON, A	AZ 85701-1621		3677	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

1	Application No.	Applicant(s)				
	10/613,281	BROOKSHIRE, MICHAEL DAVID				
♥ Office Action Summary	Examiner	Art Unit				
	Jack W. Lavinder	3677				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with t	he correspondence address				
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by stany reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply of the reply within the statutory minimum of thirty (30 iod will apply and will expire SIX (6) MONTHS atute, cause the application to become ABAND	be timely filed) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).				
Status						
 1) Responsive to communication(s) filed on <u>20 December 2004</u>. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is 						
closed in accordance with the practice unde	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	,					
4)⊠ Claim(s) <u>1-12</u> is/are pending in the applicat						
4a) Of the above claim(s) <u>13-24</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-12</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction an	d/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Exam	iner.					
10)⊠ The drawing(s) filed on <u>7/3/03</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the cor	· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •				
Priority under 35 U.S.C. § 119						
12)☐ Acknowledgment is made of a claim for fore a)☐ All b)☐ Some * c)☐ None of:	ign priority under 35 U.S.C. § 11	9(a)-(d) or (f).				
1. Certified copies of the priority docume	ents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the p	•	eived in this National Stage				
application from the International Bur * See the attached detailed Office action for a		eived				
	iot of the defined copies not rest	5,1704.				
Attachment(s) 1) Notice of References Cited (PTO-892)	4) T Interview 0	nany (PTO 413)				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 	4) Interview Sumn Paper No(s)/Ma 5) Notice of Inform 6) Other:					
J.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office	Action Summary	Part of Paper No./Mail Date 1				

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 5, 9-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer, 250378.

Regarding claim 1, Meyer discloses a cut gemstone (A) having a crown, a girdle and a pavilion (page 1, lines 57-62). Meyer discloses a crown having a central facet (A in figure 4) and a plurality of facets radiating from the central facet to the girdle (figures 3 and 4) with each facet of the plurality of contiguous facet after a first set being disposed such that each facet is nested between two preceding facets (figure 5 shows this type of facet orientation).

Regarding claim 2, Meyer discloses facets in the shape of parallelograms (figure 5).

Regarding claim 3, Meyer discloses a plurality of facets that resemble squares, except for the facets sharing an edge with the girdle (figure 5).

Regarding claim 5, Meyer discloses radially disposed sets of facets (figure 5).

Regarding claim 9, Meyer discloses a pavilion with 16 facets (figure 3).

Regarding claim 10, Meyer discloses a pavilion having a cutlet (figure 3).

Regarding claim 12, Freiesleben discloses a pavilion angle of approximately 40 degrees (col. 3, line 17). This is considered to meet the limitation of an angle of 40.75 degrees as stated in the claim.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 4, 6, 7, 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer.

Regarding claim 4, Meyer discloses a large number of facets but fails to disclose exactly 176 facets. The examiner takes official notice that the number of facets cut into a gemstone is considered to be a design choice by the artisan cutting the stone.

Depending on the shape and size of the gemstone, the addition of facets cut into the stone will make the stone more precious and brilliant. Therefore, it would have been obvious to cut 176 facets into the crown of the gemstone in order to increase the brilliance of the gemstone to make it more aesthetically pleasing to the wearer of the gemstone.

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Regarding claim 6, Meyer discloses at least six sets of facets. As stated above with respect to the rejection of claim 4, the examiner again takes official notice that the number of sets of facets on the crown of the gemstone is considered to be a design choice by the artisan cutting the stone. Depending on the shape and size of the gemstone, the addition of five more sets of facets cut into the stone will make the stone more precious and brilliant. Therefore, it would have been obvious to have cut eleven sets of facets into the crown of the gemstone in order to increase the brilliance of the gemstone to make it more aesthetically pleasing to the wearer of the gemstone.

Regarding claim 7, Meyer is applied in the same manner as applied above to claims 4 and 6 with regard to the number of facets in each set of facets being 16.

Regarding claim 8, Meyer discloses that each set of facets is cut at an ever-increasing angle from the horizontal plane starting from the top set of facets (figure 5). The examiner takes official notice that the exact angles are considered to be a design choice by the artisan cutting the stone. Depending on the shape and size of the gemstone, the angles at which the facets are cut into the stone will make the stone more precious and brilliant. Therefore, it would have been obvious to have cut the sets of facets at the specific angles for each of the sets of facets into the crown of the gemstone in order to increase the brilliance of the gemstone to make it more aesthetically pleasing to the wearer of the gemstone.

Regarding claim 11, Meyer discloses a pavilion with facets, but fails to discloses a pavilion with 16 facets wherein the facets extend from the girdle to the cutlet.

Freiesleben discloses a cut diamond having a pavilion with 16 facets extending from the girdle to the cutlet (figure 4b) in increase the brilliance and aesthetics of the cut diamond.

It would have been obvious to a person having ordinary skill to have cut 16 facets extending from the girdle to the cutlet, as taught by Freiesleben, into Meyer's gemstone pavilion to increase the brilliance and aesthetics of the gemstone.

Regarding claim 12, assuming that applicant doesn't agree with the examiner's above interpretation of Meyer, the examiner takes official notice that the specific angle of the pavilion facets is considered to be a design choice to the artisan cutting the gemstone in order to bring out the highest brilliance capable of the specific gemstone. Therefore, it would have been obvious to a person having ordinary skill in the art to have cut the pavilion facets at an angle of 40.75 degrees in order to increase the brilliance and aesthetics of the gemstone.

Election/Restrictions

- 5. Applicant's election of claims 1-12 in the reply filed on 12/20/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- 6. Claims 13-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/20/04.

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murrin, 949657, has been as disclosing a cut gemstone (5) having a crown, a girdle and a pavilion (figure 1 and 3). Murrin discloses a crown having a central star shaped (just about any shape can be considered star shaped) facet (inherently discloses a top facet) and a plurality of facets radiating from the central facet to the girdle (figure 1) with each facet of the plurality of contiguous facets after a first set being disposed such that each facet is nested between two preceding facets (figure 1 shows this type of facet orientation).

Murrin further discloses

- rectangular facets in the shape of parallelograms (figure 1)
- a plurality of facets that resemble squares, except for the facets
 sharing an edge with the girdle (figure 1)
- radially disposed sets of facets (figure 1)
- a pavilion with 12 facets (figures 1 and 3) and a cutlet
- pavilion having an angle of around 40 degrees to the horizontal, but
 fails to disclose a specific angle of 40.75 degrees

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack W. Lavinder whose telephone number is 703-308-3421. The examiner can normally be reached on Mon-Friday, 9-4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jack W Lavinder Primary Examiner

Arf Unit 3677

3/7/05